



# Australian Bureau of Statistics

## 1352.0.55.121 - Research Paper: Constructing Error Bands for Mortality Rates using Simulation (Methodology Advisory Committee), Nov 2011

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### Summary

#### About this Release

Indigenous mortality estimates are a key input informing the National Indigenous Reform Agreement (NIRA). Estimates of the mortality rates include many sources of error. However the current standard methods used for deriving confidence intervals, and for associated hypothesis testing, consider only the death counts to have variability. This has raised concerns about their adequacy and whether the conclusions drawn from these intervals may be misleading. A simulation approach has been investigated by the ABS to better capture the multiple sources of uncertainty in the rates. Comparison of this simulation method to the standard method found that while the simulation method led to significantly larger intervals in general, in most situations of interest the conclusions drawn about statistical significance were largely unchanged.

The Research Paper can be found on the Downloads page

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